

teeth as though they were homologous in the two genera. I there identified those teeth in *Synoplotherium* as canines, adding that they were probably the same in *Anchippodus*. Having determined the carnivorous affinities of the former genus, the homology of these apparently similar teeth in the latter becomes problematical. With our present knowledge, the type of molar teeth in *Anchippodus* resembles that of many ungulates, and it is not therefore probably allied to *Synoplotherium*. Nevertheless it is far from certain that the teeth in question are incisors, and that the genera are in nowise related, though a similar modification of a remarkable character in distinct but co-existent types is by no means an unprecedented circumstance.

The remains on which the above identification is based, were found by the writer on a terrace of the Mammoth Buttes near South Bitter Creek in Wyoming. The cranium and fore foot and leg were excavated from the deposit.

Formation, the Bridger Group of the Eocene of Hayden.

Prof. Marsh has described two genera of *Carnivora* from the same formation, embracing species approaching this one in size. They are both distinguished by the broader forms of the crowns of the inferior molar teeth and other points.

---

*Stated Meeting, April 18th, 1873.*

Present, 23 members.

Vice-President, Prof. CRESSON, in the Chair.

A letter with photograph, was received from Mr. Edmund Quiney, dated Dedham, Mass., April 11th, 1873.

A letter requesting a set of the Society's Proceedings was received from Prof. Frank H. Bradley, of the East Tennessee University, State Agricultural College, Knoxville, dated April 15, 1873. On motion, the University was ordered to be placed on the Correspondents' List, to receive the Proceedings from the beginning.

A letter requesting missing Numbers 83, 84, 85, was received from R. Ketzchen, dated Chemnitz, Jan. 8, 1873, and referred to the Secretaries to act.

A letter proposing exchanges with the Victoria Institute, or Philosophical Society of Great Britain, was received from Mr. F. Petrie, Secretary, dated 8 Adelphi Terrace, Strand, London, W. C., 1st April, 1873. On motion, that Institute was ordered to be placed on the Correspondents' List, to receive Transactions and Proceedings.

Prof. Cope read a paper "On the Osteology of the extinct Tapiroid Hyrachyns."

And another "On the Origin of the Orders of the Mammalia Educabilia."

Mr. Lesley exhibited and described a Micrometer for Office-use by Civil Engineers and Geologists.

Two specimens of old wood carving was exhibited by Prof. Frazer, which he had found lying among the debris of a destroyed temple and village, situated on an artificial (?) mound on the banks of the Rio Pecos, 150 miles above Santa Fe, in New Mexico, known by the traders and Indians as the Ancient Settlement, of which no tradition survives.

Dr. Allen discussed the markings on the specimens and considered them not Aztec, although perhaps manufactured under an influence emanating from the Aztec regime. They resembled the base and top of columns. One showed unmistakable evidence of having been merely a post, for there was an ornament on its flattened top. The tori were rudely cross-barred, and the sunken bands were scored at intervals in one direction by some instrument like an inch gouge, and at a single blow. An iron sharp-edged tool would be necessary to make such a mark. Similar relics have been brought back by Major Powell, whose collection of them is large. The marks on them are similar: and occasionally single Aztec symbols occur. The Indians pretend to comprehend their meaning.

General Kane, who has just returned from a long journey through the Mormon and Southern Indian Regions, objected to the use of the term Aztec as meaningless, believing that no such race ever existed. He alluded to his long residence among the Indian tribes west of the Mississippi River, in 1846, when he first learned to know the caste distinctions in the different nations: the aristocratic part of the tribe being quite distinct from the common part. A third distinction of an enslaved caste also obtains. In his subsequent visits to his old Indian friends, now sadly diminished in numbers, his former views were reinforced by newer observations and con-

versations with the chiefs and warriors. The Navajo Indians, for instance, hold a part of the tribe in slavery. These slave Indians alone bear burdens. Major Powell was deceived in supposing that his carriers were genuine Navajos. They were Navajo slaves; and his report of his having induced the aristocratic Navajos to tote his luggage was received from the mouth of Gen'l Kane with a good-natured amused derision. He saw the slave of a Navajo Chief with the features of another tribe; yet the slave was born in the Navajo lodges and was called a Navajo.

Gen. Kane stated as a law that when a strong race conquers a weak one it permits the vulgar part of the weak race to survive, enslaves it and incorporates it more or less completely with the aristocratic part of the vanquished tribe. Natural laws aid in this process. The aristocratic female part of a tribe are more exposed to syphilism, and the aristocratic warriors and chiefs more exposed in battle than the common Indians.

Pending nominations from 715 to 735 were read and Nos. 733 and 735 postponed.

The ballot-boxes being scrutinized by the presiding officer the following gentlemen were declared to be duly elected members of the American Philosophical Society:

Sir William Thompson, of England.

Mr. A. R. Wallace, of England.

Mr. Phillip Lutly Selater, Secretary of the Zoological Society, London.

Sir Henry Thompson, M. D., Professor of Surgery in the University Hospital, London.

M. Edouard Dupont, Director of the R. Museum of Natural History, Brussels.

Baron Selys de Longchamps, of Liège.

M. Theodore M. Gougain, of Bayeaux, Calvados, France.

M. Henri de Saussure, of Geneva.

Sig. Giovanni Capellini, of Bologna.

Sig. Giovanni Battista Rossi, of Rome.

Sig. Prof. Palmieri, of the Observatory on Mt. Vesuvius.

Prof. Heinrich Helmholtz, of the University at Berlin.  
 Prof. Theodor Mommsen.  
 Mr. Theodore D. Rand, of Philadelphia.  
 Prof. Joseph LeConte, of California.  
 Prof. John LeConte, of California.  
 Mr. John Fulton, of Saxton, Huntingdon, Co., Pa.  
 Mr. Lloyd P. Smith, of Philadelphia.  
 Prof. Geo. F. Barker, of the University of Pennsylvania,  
 in West Philadelphia.  
 And the meeting was adjourned.

ON THE OSTEOLOGY OF THE EXTINCT TAPIROID  
 HYRACHYUS.

BY PROF. E. D. COPE, A. M.

(Read before the American Philosophical Society, April 18, 1873.)

This genus was originally described by Leidy\* from portions of skeletons of individuals from the Eocene tertiary of Wyoming. He recognized it as related to the *Lophiodon* of Cuvier in dentition, and as sharing with characters of that Eocene genus, peculiarities which belong to the existing genus *Tapirus*.

Having obtained a large series of remains of this genus, including more or less numerous portions of six species with nearly complete skeleton of *H. eximius*, Leidy, I propose to give such an account of its osteology as will place its relations on a certain basis.

The characters which distinguish its dentition from those of the allied genera are as follows:

*Tapirus*, Briss. *Lower jaw*: third molar two-crested; three premolars, the third and fourth with two transverse crests. *Upper jaw*: seven molars, first with an inner heel tubercle; other premolars with two transverse crests.

*Hyrachyus*, Leidy. *Lower jaw*: third molar with two crests; four premolars, third and fourth with one transverse and one longitudinal crest. *Upper jaw*: seven molars, first without interior heel; premolars with two transverse crests.

*Lophiodon*, Cuvier. *Lower jaw*: third molar with three cross-crests; premolars three, Nos. 2 and 3 with longitudinal crests. *Upper jaw*: premolars with longitudinal crest only; No. 4 with two transverse crests. *Upper jaw*: premolars with only one transverse crest.

In *Hyrachyus* the nasal bones are elongate, and unite with the maxillaries anterior to the orbit; in *H. eximius* above the foramen infra-orbitale exterius; in *Tapirus* those bones are much shortened, and either do not

\* Hayden's U. S. Geological Survey of Montana. 1871, p. 361.